FIG. 1A

```
1531    Slb1 ──►
GAGATTAGAACACCATTGAATGGGATTATTGGWATGACYCAGTTGTCRCTTGATACAGA 1590
GluIleArgThrProLeuAsnGlyIleIleGlyMetThrGlnLeuSerLeuAspThrGlu  530
               H1
TTGACRCAGTACCAACGAGAGATGTTGTCGATTGTGCATAACTTGGCAAATTCCTTGTTG 1650
LeuThrGlnTyrGlnArgGluMetLeuSerIleValHisAsnLeuAlaAsnSerLeuLeu  550

ACCATTATAGACGATATATTGGATATTTCTAAGATTGAGGCGAATAGAATGACGGTGGAA 1710
ThrIleIleAspAspIleLeuAspIleSerLysIleGluAlaAsnArgMetThrValGlu  570

CAGATTGATTTTTCATTAAGAGGGACAGTGTTTGGTGCATTGAAAACGTTAGCCGTCAAA 1770
GlnIleAspPheSerLeuArgGlyThrValPheGlyAlaLeuLysThrLeuAlaValLys  590

GCTATTGAAAAAAACCTAGACTTGACCTATCAATGTGATTCATCGTTTCCAGATAATCTT 1830
AlaIleGluLysAsnLeuAspLeuThrTyrGlnCysAspSerSerPheProAspAsnLeu  610

ATTGGAGATAGTTTTAGATTACGACAAGTTATTCTTAACTTGGCTGGTAATGCTATTAAG 1890
IleGlyAspSerPheArgLeuArgGlnValIleLeuAsnLeuAlaGlyAsnAlaIleLys  630
                                               N
TTTACTAAAGAGGGGAAAGTTAGTGTTAGTGTGAAAAAGTCTGATAAAATGGTGTTAGAT 1950
PheThrLysGluGlyLysValSerValSerValLysLysSerAspLysMetValLeuAsp  650

AGTAAGTTGTTGTTAGAGGTTTGTGTTAGCGACACGGGAATAGGTATAGAGAAAGACAAA 2010
SerLysLeuLeuLeuGluValCysValSerAspThrGlyIleGlyIleGluLysAspLys  670
                                     G1
TTGGGATTGATTTTCGATACCTTCTGTCAAGCTGATGGTTCTACTACAAGAAAGTTTGGT 2070
LeuGlyLeuIlePheAspThrPheCysGlnAlaAspGlySerThrThrArgLysPheGly  690
  ◄── Slb2
GGTACAGGTTTAGGGTTGTCAATTTCCAAACAGTTGATACATTTAATGGGTGGAGAGATA 2130
GlyThrGlyLeuGlyLeuSerIleSerLysGlnLeuIleHisLeuMetGlyGlyGluIle  710
     G2
TGGGTTACTTCGGAGTATGGATCCGGRTCAAACTTTTATTTTACGGTGTGCGTGTCGCCA 2190
TrpValThrSerGluTyrGlySerGlySerAsnPheTyrPheThrValCysValSerPro  730

TCTAATATTAGATATACTCGACAAACCGAACAATTGTTACCATTTAGTTCCCATTATGTG 2250
SerAsnIleArgTyrThrArgGlnThrGluGlnLeuLeuProPheSerSerHisTyrVal  750

TTATTTGTATCGACTGAGCATACTCAAGAAGAACTTGATGTGTTGAGAGATGGAATTATA 2310
LeuPheValSerThrGluHisThrGlnGluGluLeuAspValLeuArtAspGlyIleIle  770
```

FIG. 1B

```
GAACTTGGATTGATACCTATAATAGTGAGAAATATTGAAGATGCAACATTGACTGAGCCG 2370
GluLeuGlyLeuIleProIleIleValArgAsnIleGluAspAlaThrLeuThrGluPro  790

GTGAAATATGATATAATTATGATTGATTCGATAGAGATTGCCAAAAAGTTGAGGTTGTTA 2430
ValLysTyrAspIleIleMetIleAspSerIleGluIleAlaLysLysLeuArgLeuLeu  810

TCGGAGGTTAAATATATTCCGTTGGTTTTGGTCCATCATTCTATTCCACAGTTGAATATG 2490
SerGluValLysTyrIleProLeuValLeuValHisHisSerIleProGlnLeuAsnMet  830

AGAGTATGTATTGATTTGGGGATATCTTCCTATGCAAATACGCCATGTTCGATCACGGAC 2550
ArgValCysIleAspleuGlyIleSerSerTyrAlaAsnThrProCysSerIleThrAsp  850

TTGGCCAGTGCGATTATACCAGCGTTGGAGTCGAGATCTATATCACAGAACTCAGACGAG 2610
LeuAlaSerAlaIleIleProAlaLeuGluSerArgSerIleSerGlnAsnSerAspGlu  870

TCGGTGAGGTACAAAATATTACTAGCAGAGGACAACCTCGTCAATCAGAAACTTGCAGTT 2670
SerValArgTyrLysIleLeuLeuAlaGluAspAsnLeuValAsnGlnLysLeuAlaVal  890

AGGATATTAGAAAAGCAAGGGCATCTGGTGGAAGTAGTTGAGAACGGACTCGAGGCGTAC 2730
ArgIleLeuGluLysGlnGlyHisleuValGluValValGluAsnGlyLeuGluAlaTyr  910
                                                  ←—— Slb3
GAAGCGATTAAGAGGAATAAATATGATGTGGTGTTGATGGATGTGCAAATGCCT       2784
GluAlaIleLysArgAsnLysTyrAspValValLeuMetAspValGlnMetPro       928
                                    __________________
                                             D
```

FIG. 2A

```
ATGAACCCCACTAAAAAACCTCGGTTATCACCAATGCAGCCCTCTGTTTTTGAAATACTC  60
MetAsnProThrLysLysProArgLeuSerProMetGlnProSerValPheGluIleLeu  20

AACGACCCTGAGCTTTATAGTCAGCACTGTCATAGCCTTAGGGAAACACTTCTTGATCAT 120
AsnAspProGluLeuTyrSerGlnHisCysHisSerLeuArgGluThrLeuLeuAspHis  40

TTCAACCATCAAGCTACACTTATCGACACTTATGAACATGAACTAGAAAAATCCAAAAAT 180
PheAsnHisGlnAlaThrLeuIleAspThrTyrGluHisGluLeuGluLysSerLysAsn  60

GCCAACAAAGCGTCCCAACAAGCACTTAGTGAAATAGGTACAGTTGTTATATCTGTTGCC 240
AlaAsnLysAlaSerGlnGlnAlaLeuSerGluIleGlyThrValValIleSerValAla  80

ATGGGAGACTTGTCGAAAAAAGTTGAGATTCACACAGTAGAAAATGACCCTGAGATTTTA 300
MetGlyAspLeuSerLysLysValGluIleHisThrValGluAsnAspProGluIleLeu 100

AAAGTCAAAATCACCATCAACACCATGATGGATCAATTACAGACATTTGCTAATGAGGTT 360
LysValLysIleThrIleAsnThrMetMetAspGlnLeuGlnThrPheAlaAsnGluVal 120

ACAAAAGTCGCCACCGAAGTCGCAAATGGTGAACTAGGTGGACAAGCGAAAAATGATGGA 420
ThrLysValAlaThrGluValAlaAsnGlyGluLeuGlyGlyGlnAlaLysAsnAspGly 140

TCTGTTGGTATTTGGAGATCACTTACAGACAATGTTAATATTATGGCTCTTAATTTAACT 480
SerValGlyIleTrpArgSerLeuThrAspAsnValAsnIleMetAlaLeuAsnLeuThr 160

AACCAAGTGCGAGAAATTGCTGATGTCACACGTGCTGTTGCCAAGGGGGACTTGTCACGT 540
AsnGlnValArgGluIleAlaAspValThrArgAlaValAlaLysGlyAspLeuSerArg 180

AAAATTAATGTACACGCCCAGGGTGAAATCCTTCAACTTCAACGTACAATAAACACCATG 600
LysIleAsnValHisAlaGlnGlyGluIleLeuGlnGeuGlnArgThrIleAsnThrMet 200

GTGGATCAGTTACGAACGTTTGCATTCGAAGTATCTAAAGTTGCTAGAGATGTTGGTGTG 660
ValAspGlnLeuArgThrPheAlaPheGluValSerLysValAlaArgAspValGlyVal 220

CTTGGTATATTAGGAGGACAAGCGTTGATTGAAAATGTTGAAGGTATTTGGGAAGAGTTG 720
LeuGlyIleLeuGlyGlyGlnAlaLeuIleGluAsnValGluGlyIleTrpGluGluLeu 240

ACTGATAATGTCAATGCCATGGCTCTTAATTTGACTACACAAGTGAGAAATATTGCCAAT 780
ThrAspAsnValAsnAlaMetAlaLeuAsnLeuThrThrGlnValArgAsnIleAlaAsn 260
```

FIG. 2B

```
GTCACCACTGCCGTTGCCAAGGGGGATTTGTCGAAAAAGTCACTGCTGATTGTAAGGG  840
ValThrThrAlaValAlaLysGlyAspLeuSerLysLysValThrAlaAspCysLycGly  280

GAAATYCTTGATTTGAAACTTACTATTAATCAAATGGTGGACCGATTACAGAATTTTGCT  900
GluIleLeuAspLeuLysLeuThrIleAsnGlnMetValAspArgLeuGlnAsnPheAla  300

CTTGCGGTGACGACATTGTCGAGAGAGGTTGGTACTTTGGGTATTTTGGGTGGACAAGCT  960
LeuAlaValThrThrLeuSerArgGluValGlyThrLeuGlyIleLeuGlyGlyGlnAla  320

AACGTACAGGATGTTGAAGGTGCTTGGAAACAGGTTACAGAAAATGTCAACCTAATGGCT 1020
AsnValGlnAspValGluGlyAlaTrpLysGlnValThrGluAsnValAsnLeuMetAla  340

ACTAATTTAACTAACCAAGTGAGATCTATTGCTACAGTTACTACTGCAGTTGCGCATGGT 1080
ThrAsnLeuThrAsnGlnValArgSerIleAlaThrValThrThrAlaValAlaHisGly  360

GATTTGTCGCAAAAGATTGATGGTCATCCCAAAGGAGAGATTTTACAATTGAAAAATACA 1140
AspLeuSerGlnLysIleAspGlyHisProLysGlyGluIleLeuGlnLeuLysAsnThr  380

ATCAACAAGATGGTGGACTCTTTGCAGTTGTTTGCATCAGAAGTGTCGAAAGTGGCACAA 1200
IleAsnLysMetValAspSerLeuGlnLeuPheAlaSerGluValSerLysValAlaGln  400

GATGTTGGTATTAATGGAAAATTAGGTATTCAAGCACAAGTTAGTGATGTTGATGGATTA 1260
AspValGlyIleAsnGlyLysLeuGlyIleGlnAlaGlnValSerAspValAspGlyLeu  420

TGGAAGGAGATTACGTCTAATGTAAATACCATGGCTTCAAATTTAACTTCGCAAGTGAGA 1320
TrpLysGluIleThrSerAsnValAsnThrMetAlaSerAsnLeuThrSerGlnValArg  440

GCTTTTGCACAGATTACTGCTGCTGCTACTGATGGGGATTTCACTAGATTTATTACTGTT 1380
AlaPheAlaGlnIleThrAlaAlaAlaThrAspGlyAspPheThrArgPheIleThrVal  460

GAAGCACTGGGAGAGATGGATGCGTTGAAAACAAAGATTAATCAAATGGTGTTTAACTTA 1440
GluAlaLeuGlyGluMetAspAlaLeuLysThrLysIleAsnGlnMetValPheAsnLeu  480

AGGGAATCGCTTCAAAGGAATACTGCGGCTAGAGAAGCTGCTGAGTTGGCCAATAGTGCG 1500
ArgGluSerLeuGlnArgAsnThrAlaAlaArgGluAlaAlaGluLeuAlaAsnSerAla  500

AAATCCGAGTTTTTAGCAAACATGTCGCATGAGATTAGAACACCATTGAATGGGATTATT 1560
LysSerGluPheLeuAlaAsnMetSerHisGluIleArgThrProLeuAsnGlyIleIle  520
                                        H1
```

FIG. 2C

GGWATGACYCAGTTGTCRCTTGATACAGAGTTGACRCAGTACCAACGAGAGATGTTGTCG 1620
GlyMetThrGlnLeuSerLeuAspThrGluLeuThrGlnTyrGlnArgGluMetLeuSer 540

ATTGTGCATAACTTGGCAAATTCCTTGTTGACCATTATAGACGATATATTGGATATTTCT 1680
IleValHisAsnLeuAlaAsnSerLeuLeuThrIleIleAspAspIleLeuAspIleSer 560

AAGATTGAGGCGAATAGAATGACGGTGGAACAGATTGATTTTTCATTAAGAGGGACAGTG 1740
LysIleGluAlaAsnArgMetThrValGluGlnIleAspPheSerLeuArgGlyThrVal 580

TTTGGTGCATTGAAAACGTTAGCCGTCAAAGCTATTGAAAAAAACCTAGACTTGACCTAT 1800
PheGlyAlaLeuLysThrLeuAlaValLysAlaIleGluLysAsnLeuAspLeuThrTyr 600

CAATGTGATTCATCGTTTCCAGATAATCTTATTGGAGATAGTTTTAGATTACGACAAGTT 1860
GlnCysAspSerSerPheProAspAsnLeuIleGlyAspSerPheArgLeuArgGlnVal 620

ATTCTTAACTTGGCTGGTAATGCTATTAAGTTTACTAAAGAGGGAAAGTTAGTGTTAGT 1920
IleLeuAsnLeuAlaGlyAsnAlaIleLysPheThrLysGluGlyLysValSerValSer 640
N

GTGAAAAAGTCTGATAAAATGGTGTTAGATAGTAAGTTGTTGTTAGAGGTTTGTGTTAGC 1980
ValLysLysSerAspLysMetValLeuAspSerLysLeuLeuLeuGluValCysValSer 660

GACACGGGAATAGGTATAGAGAAAGACAAATTGGGATTGATTTTCGATACCTTCTGTCAA 2040
AspThrGlyIleGlyIleGluLysAspLysLeuGlyLeuIlePheAspThrPheCysGln 680
G1

GCTGATGGTTCTACTACAAGAAAGTTTGGTGGTACAGGTTTAGGGTTGTCAATTTCCAAA 2100
AlaAspGlySerThrThrArgLysPheGlyGlyThrGlyLeuGlyLeuSerIleSerLys 700
G2

CAGTTGATACATTTAATGGGTGGAGAGATATGGGTTACTTCGGAGTATGGATCCGGRTCA 2160
GlnLeuIleHisLeuMetGlyGlyGluIleTrpValThrSerGluTyrGlySerGlySer 720

AACTTTTATTTTACGGTGTGCGTGTCGCCATCTAATATTAGATATACTCGACAAACCGAA 2220
AsnPheTyrPheThrValCysValSerproSerAsnIleArgTyrThrArgGlnThrGlu 740

CAATTGTTACCATTTAGTTCCCATTATGTGTTATTTGTATCGACTGAGCATACTCAAGAA 2280
GlnLeuLeuProPheSerSerHisTyrValLeuPheValSerThrGluHisThrGlnGlu 760

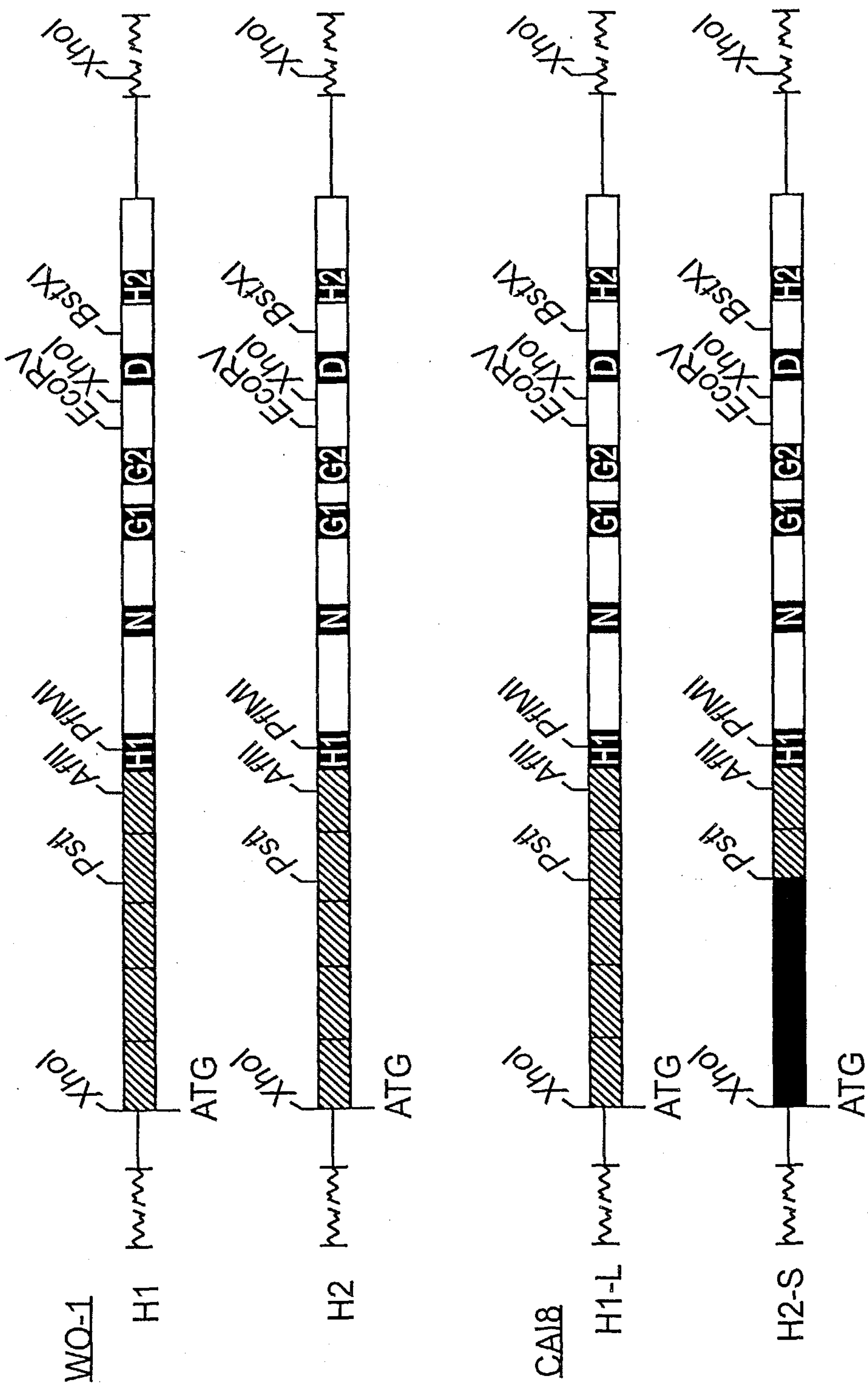
GAACTTGATGTGTTGAGAGATGGAATTATAGAACTTGGATTGATACCTATAATAGTGAGA 2340
GluLeuAspValLeuArgAspGlyIleIleGluLeuGlyLeuIleProIleIleValArg 780

FIG. 2D

```
AATATTGAAGATGCAACATTGACTGAGCCGGTGAAATATGATATAATTATGATTGATTCG 2400
AsnIleGluAspAlaThrLeuThrGluProValLysTyrAspIleIleMetIleAspSer  800

ATAGAGATTGCCAAAAAGTTGAGGTTGTTATCGGAGGTTAAATATATTCCGTTGGTTTTG 2460
IleGluIleAlaLysLysLeuArgLeuLeuSerGluValLysTyrIleProLeuValLeu  820

GTCCATCATTCTATTCCACAGTTGAATATGAGAGTATGTATTGATTTGGGGATATCTTCC 2520
ValHisHisSerIleProGlnLeuAsnMetArgValCysIleAspLeuGlyIleSerSer  840

TATGCAAATACGCCATGTTCGATCACGGACTTGGCCAGTGCGATTATACCAGCGTTGGAG 2580
TyrAlaAsnThrProCysSerIleThrAspLeuAlaSerAlaIleIleProAlaLeuGlu  860

TCGAGATCTATATCACAGAACTCAGACGAGTCGGTGAGGTACAAAATATTACTAGCAGAG 2640
SerArgSerIleSerGlnAsnSerAspGluSerValArgTyrLysIleLeuLeuAlaGlu  880

GACAACCTCGTCAATCAGAAACTTGCAGTTAGGATATTAGAAAAGCAAGGGCATCTGGTG 2700
AspAsnLeuValAsnGlnLysLeuAlaValArgIleLeuGluLysGlnGlyHisLeuVal  900

GAAGTAGTTGAGAACGGACTCGAGGCGTACGAAGCGATTAAGAGGAATAAATATGATGTG 2760
GluValValGluAsnGlyLeuGluAlaTyrGluAlaIleLysArgAsnLysTyrAspVal  920

GTGTTGATGGATGTGCAAATGCCTGTAATGGGTGGGTTTGAAGCTACGGAGAAGATTCGA 2820
ValLeuMetAspValGlnMetProValMetGlyGlyPheGluAlaThrGluLysIleArg  940
      __________________
              D
CAATGGGAGAAAAAGTCTAACCCAATTGACTCGTTGACCTTTAGGACTCCAATTATTGCC 2880
GlnTrpGluLysLysSerAsnProIleAspSerLeuThrPheArgThrProIleIleAla  960

CTCACTGCACACGCCATGTTAGGTGATAGAGAAAAGTCATTGGCCAAGGGGATGGACGAT 2940
LeuThrAlaHisAlaMetLeuGlyAspArgGluLysSerLeuAlaLysGlyMetAspAsp  980

TATGTGAGTAAGCCATTGAAGCCGAAATTGTTAATGCAGACGATAAAGAAGTGTATTCAT 3000
TyrValSerLysProLeuLysProLysLeuLeuMetGlnThrIleAsnLysCysIleHis 1000
                  __________________________________________
                                    H2
AATATTAACCAGTTGAAAGAATTGTCGAGAAATAGTAGGGGTAGCGATTTTGCAAAGAAG 3060
AsnIleAsnGlnLeuLysGluLeuSerArgAsnSerArgGlySerAspPheAlaLysLys 1020
_______________________________________

ATGACCCGAAACACACCCGGCCGCACGACCCGTCAGGGGAGTGATGAGGGGAGTGTAAAG 3120
MetThrArgAsnThrProGlySerThrThrArgGlnGlySerAspGluGlySerValLys 1040
```

FIG. 2E

```
GACATGATTGGGGACACTCCCCGTCAAGGGAGTGTGGAGGGAGGGGGTACAAGTAGTAGA 3180
AspMetIleGlyAspThrProArgGlnGlySerValGluGlyGlyGlyThrSerSerArg 1060

CCAGTACAGAGAAGGTCTGCCAGGGAGGGGTCGATCACTACAATTAGTGAACAAATCGAC 3240
ProValGlnArgArgSerAlaArgGluGlySerIleThrThrIleSerGluGlnIleAsp 1080

CGTTAG                                                       3246
Arg***                                                       1082
```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H2
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H1-L
H2-S
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XhoI
PstI
AflII
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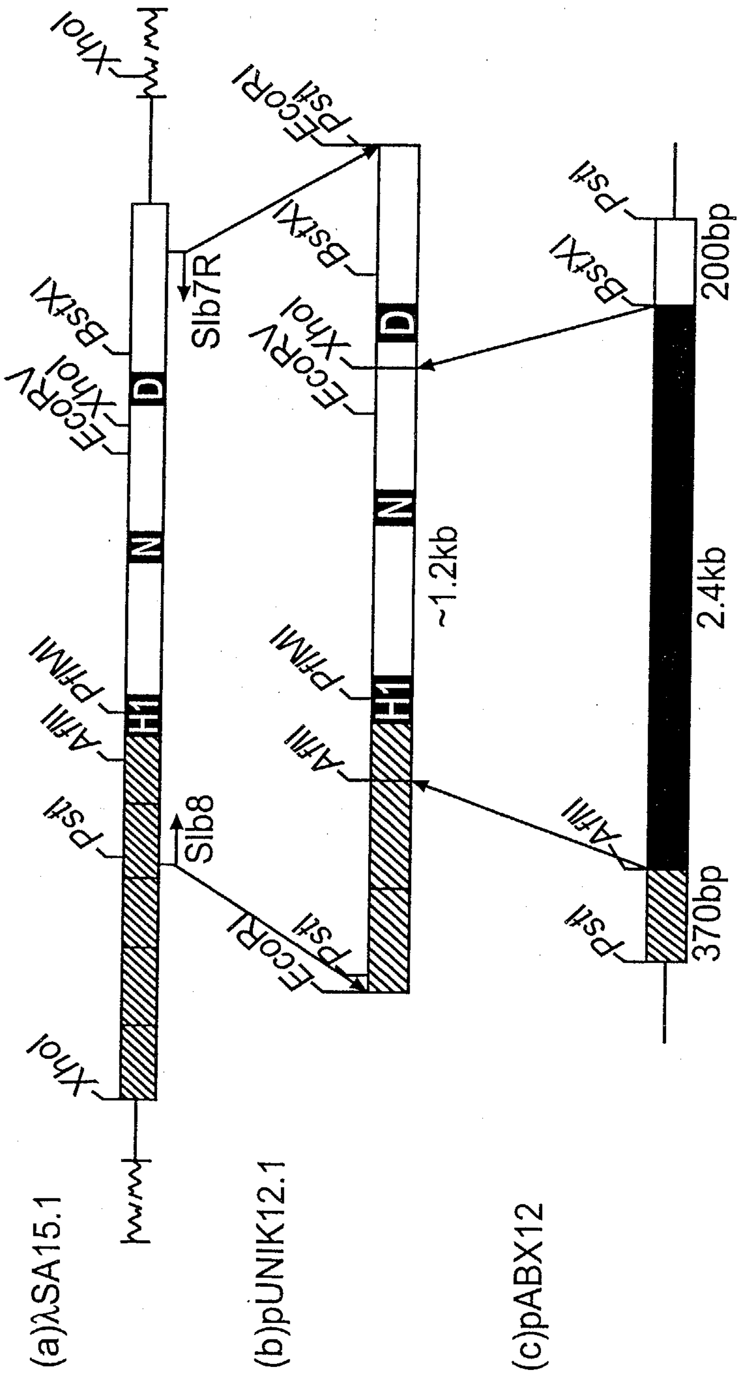
H1
N
G1
G2
EcoRV
XhoI
D
BstXI
H2
XhoI

FIG. 3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(c)pABX12
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PstI
AflII
PflMI
H1
N
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BstXI
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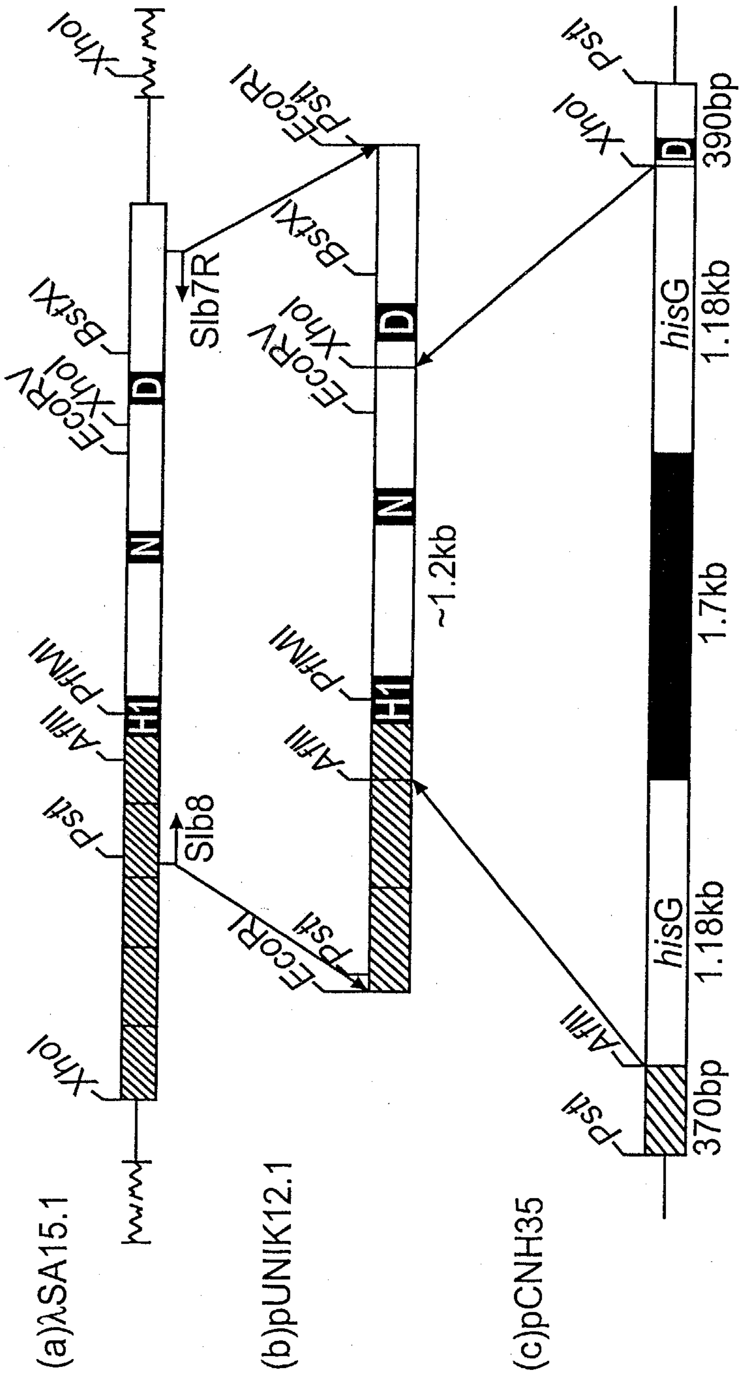
Slb7R
EcoRI
~1.2kb
370bp
2.4kb
200bp

FIG. 4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XhoI
PflMI
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PstI
XhoI
D
N
H1
Slb7R
Slb8
EcoRI
PstI
BstXI
XhoI
EcoRV
PflMI
AflII
PstI
EcoRI
~1.2kb
PstI
XhoI
AflII
PstI
hisG
hisG
390bp
1.18kb
1.7kb
1.18kb
370bp

FIG. 5